IN THE CLAIMS

- 1. (currently amended): A process for the purification of an organic solution of a nucleoside phosphoramidite or nucleoside H-phosphonate oligonucleotide synthon from an organic solution of a nucleoside phosphoramidite or nucleoside H-phosphonate oligonucleotide synthon and lower molecular weight impurities, which comprises subjecting said organic solution to nanofiltration whereby the ratio of synthon to lower molecular weight impurities in the solution is increased after the nanofiltration.
- 2. (cancelled):
- 3. (previously presented): A process according to claim 1, wherein the oligonucleotide synthon is a compound of formula (1):

wherein R¹ is a protecting group, B is a nucleoside base, R² represents -H, -F, -OR⁴, -NR⁵R⁶, -SR⁷, or aliphatic group, each R³ independently is a C₁₋₆ alkyl group, PG is a phosphorus protecting group, R⁴ represents -H, an aliphatic group, an aryl group, an aralkyl, an alcohol protecting group, or -(CH₂)_q-NR⁹R¹⁰, R⁵ and R⁶ are each, independently, -H, an aliphatic group, or an amine protecting group, or R⁵ and R⁶ taken together with the nitrogen to which they are attached are a heterocyclyl group, R⁷ represents -H, an aliphatic group, or a thiol protecting group, R⁹ and R¹⁰ are each, independently, -H, an aryl group, a heteroaryl group, an aliphatic group, an aralkyl group, a heteroaralkyl group or an amine protecting group, or R⁹ and R¹⁰ taken together with the nitrogen to which they are attached form a heterocyclyl group; and q is an integer from 1 to about 6.

- 4. (original): A process according to claim 3, wherein PG is a betacyanoethyl group, and each R³ is an isopropyl group.
- 5. (previously presented): A process according to claim 1, wherein a polyimide nanofiltration membrane is employed.

- 6. (previously presented): A process according to claim 1, wherein a nanofiltration membrane having a molecular weight cut off of 400 is employed.
- 7. (previously presented): A process according to claim 1, wherein the process is operated in cross flow configuration.
- 8. (previously presented): A process according to claim 1, wherein the process employs a pressure of from 15 to 35 bar.
- 9. (previously presented): A process according to claim 1, wherein fresh organic solvent corresponding to the volume passed through the nanofiltration membrane is added into the retained synthon solution.
- 10. (previously presented): A process according to any one of claims 1 to 4, wherein a polyimide nanofiltration membrane having a molecular weight cut-off of 400 is employed.
- 11. (previously presented): A process according to claim 10, wherein the process is operated in cross flow configuration.
- 12. (previously presented): A process according to any one of claims 1 to 4, wherein a polyimide nanofiltration membrane is employed and fresh organic solvent corresponding to the volume passed through the nanofiltration membrane is added into the retained synthon solution.
- 13. (previously presented): A process according to claim 12, wherein a polyimide nanofiltration membrane having a molecular weight cut-off of 400 is employed.
- 14. (previously presented): A process according to claim 13, wherein the process is operated in cross flow configuration.